

REMARKS

Claims 1, 5, 7, 9, 11 - 12, and 17 have been amended. Claims 18 - 25 have been added. No new matter has been introduced with these amendments or added claims, all of which are supported in the application as originally filed. Claims 1, 3, 5, 7, 9 - 13, and 17 - 25 are now in the application.

Applicant is not conceding that the subject matter encompassed by the claims as presented prior to this Amendment is not patentable over the art cited by the Examiner, and claim amendments and cancellations in the present application are directed toward facilitating expeditious prosecution of the application and allowance of the currently-presented claims at an early date. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by the claims as presented prior to this Amendment and additional claims, in one or more continuing applications.

I. Rejection under 35 U.S.C. §103(a)

Paragraph 3 of the Office Action dated February 9, 2009 (hereinafter, “the Office Action”) states that Claims 1, 3, 5, 9 - 13, and 17¹ are rejected under 35 U.S.C. §103(a) as being obvious over “Resource Description Framework (RDF) Model and Syntax Specification” (hereinafter, “RDF Syntax”) in view of U. S. Patent 6,654,759 to Brunet. This rejection is respectfully traversed with regard to the claims as currently presented.

¹ Applicant respectfully notes that dependent Claim 7 has been omitted from this list of claims.

At the outset, Applicant respectfully notes that page 9, lines 8 - 11 of the Office Action state, with regard to Applicant's response submitted on October 28, 2008 (hereinafter, "Applicant's previous response"), that Applicant's arguments "fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references". Applicant respectfully disagrees, and submits that his previous response clearly sets out detailed explanations of how his claim language patentably distinguishes over the references. See pages 8 - 12 of Applicant's previous response, where a number of differences are specifically pointed out.

Claim 1 as previously presented was overly restrictive of Applicant's invention. Accordingly, Claim 1 is amended herein, and Applicant presents arguments, below, demonstrating that Claim 1 is patentable over the references as currently presented.

Lines 8 - 11 of Claim 1 now recite

defining, in the class definition of a topmost class of the hierarchical schema, a naming rule property and an instance identity property, the naming rule property for storing a naming rule for each of the classes in an associated naming rule property value, and the instance identity property for storing an identity of each of the instances in an associated instance identity property value (emphasis added)

With regard to the claim language as previously presented, which recited "defining ... a naming rule property and an instance identity property", the Office Action cited RDF Syntax, section 2.2, para. 2, "XML rules". Office Action, page 3, lines 11 - 13. As Applicant has noted

in his previous response, the Office Action fails to indicate how “XML rules” supposedly discloses a naming rule property and an instance identity property. The current Office Action fails to remedy this defect. Applicant respectfully notes, however, that the cited text is irrelevant to his recited claim language, as the cited text pertains to a Backus-Naur Form of describing allowable syntax (sometimes referred to as a “grammar”). What is stated in the cited text in terms of “XML rules” is as follows:

The requirement that the property and type names in end-tags exactly match the names in the corresponding start-tags is implied by the XML rules.

Thus, by way of illustration, if a property name has a start tag with the syntax

<Property_Name_ABC>

then – according to the cited text – the XML rules require that there is a matching end tag with the syntax

</Property_Name_ABC>

That is, the same “Property_Name_ABC” syntax used inside the start tag < ...> must also be used inside the </ ... > end tag. This in no way discloses defining a naming rule property or an instance identity property in a class definition of a topmost class of a hierarchical schema (or anywhere else in a hierarchical schema, for that matter). Accordingly, the Office Action fails to cite a reference that teaches the claim language recited on lines 8 - 11 of Claim 1.

Lines 13 - 17 of Claim 1 now recite

each class at levels of the hierarchical schema beneath the topmost class inherits the naming rule property and the instance identity property, thereby

requiring each class in the hierarchical schema to store a class-specific naming rule as the value of the naming rule property and each instance of each of the classes to store an instance-specific identity as the value of the instance identity property (emphasis added)

The Office Action cites col. 7, lines 35 - 41 of Brunet with regard to a naming rule property. Office Action, page 5, lines 1 - 3. Applicant respectfully disagrees with the Office Action interpretation of Brunet's discussions of a naming rule, however, noting that Brunet explicitly states that

- “The objects in the tree can be uniquely identified using a rule for allocating a name, commonly called a naming rule, based on a hierarchical order.” (col. 7, lines 30 - 32, emphasis added);
- “... the naming attribute being the attribute that, in the class, allows the unique identification ... of an instance relative to its mother instance.” (col. 7, lines 35 - 39, emphasis added); and
- “Each instance in the base MIB is uniquely identified by its distinguished name DN, which is the sequence of names RDN on the path between the root and the instance ...” (col. 7, lines 43 - 46, emphasis added).

In other words, as stated by these three quoted portions of text, the uniqueness in Brunet requires consideration of the hierarchical order in which an object appears in the tree. Applicant's claim language, in sharp contrast, does not require consideration of the hierarchical order, and instead recites that the uniqueness comes from a class-specific naming rule (Claim 1, lines 14 - 15) which is selected to ensure that the identity of each instance is unique within the hierarchical schema (Claim 1, lines 20 - 21).

Page 10, lines 6 - 15 of the Office Action discuss the uniqueness in Brunet, presenting an example that supposedly supports the position maintained in the Office Action. Applicant

respectfully disagrees with this analysis. Suppose, for example, that one class in the hierarchy is named “Alpha_Employees” and an instance of this class pertains to an employee John Smith (which, in the Office Action example, uses the syntax “Smith.John”). Nothing prevents the hierarchy from also having a class named “Beta_Employees” which has an instance pertaining to a different John Smith. Accordingly, Brunet uses the hierarchical path to the root for the uniqueness of the employee instances, as recited in the above-quoted text portions from col. 7.

Applicant’s Claim 1 also recites “each instance of each of the classes [stores] an instance-specific identity as the value of the instance identity property” (Claim 1, lines 16 - 17) where this stored identity “is unique within the hierarchical schema” (Claim 1, lines 20 - 21). In sharp contrast, Brunet has no teaching that his “unique” instance identities are stored, and in particular, does not disclose storing the identities in the instances as the value of an instance identity property. Instead, Brunet uses an approach where a unique instance identity is determined by traversing the hierarchy to collect the “sequence of names RDN on the path between the root and the instance”, as noted by the above-quoted portions of text from col. 7 (and in particular, see col. 7, lines 43 - 46). Referring to the above-discussed example, Brunet does not teach storing his “Alpha_Employees” class name in the instances of that class – in fact, this would be unnecessary storage overhead, because Brunet discloses using the path from the instance to the root for determining the instance name.

In view of the above, Applicant respectfully submits that the cited references fail to teach, or suggest, all of the claim elements of Claim 1, in contrast to the assertions in the Office Action.

Independent Claim 1 is therefore deemed patentable over RDF Syntax and Brunet, whether taken singly or in combination (assuming, *arguendo*, that such combination could be made and that one of skill in the art would be motivated to attempt it). Dependent Claims 3, 5, 7, and 9 - 13 are deemed patentable at least by virtue of the patentability of Claim 1 from which they depend.

Applicant also respectfully submits that various ones of his dependent claims recite claim language not taught by the cited references. Representative ones of these dependent claims will now be discussed.

Added dependent Claim 18 recites

The method according to Claim 1, wherein the value of the instance identity property for each of the instances specifies a class name of a particular one of the classes that corresponds to the resource type of the resource represented by that instance, and, for each of the at least one property specified in the naming rule for the particular class, a name and value pair comprising the property and a corresponding value, for the resource represented by this instance, of that property. (emphasis added)

When analyzing similar claim language previously presented in Claim 1, the Office Action cites the col. 7, lines 35 - 36 of Brunet, referring to “<naming attribute> <value> pair”. Office Action, page 5, line 18 - page 6, line 2 and page 10, lines 16 - 21. Applicant respectfully disagrees. Notably, Applicant’s claim language as recited in Claim 18 specifies 3 different values – namely, (1) a class name; (2) a property; and (3) a corresponding [property] value, as shown by underlying in the above-quoted claim language. In sharp contrast, the “pair” from Brunet specifies 2 values. Accordingly, Brunet does not disclose a instance identity property value as

claimed by Applicant.

Added dependent Claim 19 recites

The method according to Claim 1, further comprising:
creating an identity for a particular one of the resources, using the naming rule for the class that corresponds to the resource type of the particular resource;
and
storing the created identity as the value of the instance identity property for an instance which represents the particular resource.

In contrast to the recited “creating an identity ... using the naming rule for the class ...”, Brunet requires using the path from the instance to the root for creating a unique instance identity, as demonstrated above with regard to Claim 1.

Referring next to independent Claim 17, Applicant respectfully notes that the Office Action analysis of this claims refers to “the remarks and discussions made [with regard to] claim 1”. Office Action, p. 8, lines 6 - 9. Applicant therefore respectfully submits that the same arguments presented above with regard to Claim 1 apply to distinguish Claim 17 from RDF Syntax and/or Brunet, and Claim 17 is therefore deemed patentable over these references.

In view of the above, the Examiner is respectfully requested to withdraw the §103 rejection of all claims as currently presented.

II. Added Claims 18 - 25

Added independent Claims 20 and 23 recite claim language analogous to that of

independent Claim 1, and are therefore deemed patentable using the same arguments presented above with regard to Claim 1. Added dependent Claims 18 - 19, 21 - 22, and 24 - 25 are deemed patentable at least by virtue of the patentability of independent Claims 1, 20, and 23 from which they depend, respectively.

III. Conclusion

Applicant respectfully requests reconsideration of the pending rejected claims, withdrawal of all presently outstanding rejections, and allowance of all remaining claims at an early date.

Respectfully submitted,

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